

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,026	02/22/2005	Thomas Beck	2002P12057WOUS 3685  EXAMINER	
75	90 05/01/2006			
Siemens Corp	oration		AURORA	, REENA
Intellectual Proj	perty Department			
170 Wood Avenue South			ART UNIT	PAPER NUMBER
Iselin, NJ 08830			2862	
			DATE MAILED: 05/01/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

W

	Application No.	Applicant(s)
	10/525,026	BECK ET AL.
Office Action Summary	Examiner	Art Unit
	Reena Aurora	2862
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was pailing to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
<ul> <li>1) ⊠ Responsive to communication(s) filed on 2/22/2</li> <li>2a) ☐ This action is FINAL 2b) ⊠ This</li> <li>3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 16 - 31 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 16 - 31 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers		
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 22 February 2005 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	e: a)⊠ accepted or b)⊡ objecte drawing(s) be held in abeyance. Section is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to.' See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119	•	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Paper No(s)/Mail Date 2/22/05	4)  Interview Summary Paper No(s)/Mail Do 5)  Notice of Informal F 6)  Other:	

Art Unit: 2862

#### **DETAILED ACTION**

Claims 16 – 31 are presented for examination.

### Claim Objections

Claim 26 objected to because of the following informalities: claim 26 depends from claim 1, it appears to be a typing error. Applicant is suggest to change the phrase "claim 1" to the phrase "claim 16". Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16 - 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Valleau et al. (5,028,100).

As to claims 16 - 18, Valleau et al. (hereinafter Valleau) discloses nondestructive eddy current testing of structural members wherein determining a degraded region of the component by an eddy current measurement, wherein at least two different measurement frequencies (col. 3, lines 33 - 39) are used for the eddy current measurement and the regions of the component do not contain any ferromagnetic materials (fig. 1 and 2, col. 7, lines 31 – 41 and Abstract).

Application/Control Number: 10/525,026

Art Unit: 2862

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 19 – 21, 23 and 26 – 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valleau et al. (5,028,100) in view of Beeck et al. (6,534,975).

As to claims 19 – 21, 23 and 26 - 30, Valleau fails to disclose oxide regions composed of oxidized carbides near a surface of the component. Beeck et al. (hereinafter Beeck) discloses eddy current test methods wherein the surface of the component is composed of oxidized carbides (col. 3, lines 10 - 13). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Valleau with the teachings of Beeck such that using oxidized carbide layer as a surface of the component would provide a precise signal measurement.

As to claim 31, Valleau fails to disclose that the component is a blade or vane.

Beek discloses that the component is a blade (Note Abstract). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Valleau with the teachings of Beeck such that using the nondestructive eddy-current testing method on a turbine blade during the test phase of coating to avoid the known destruction of the turbine blade resulting in reduced cost of the device.

Application/Control Number: 10/525,026

Art Unit: 2862

Claims 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valleau et al. (5,028,100) in view Goldfine et al. (5,793,206).

As to claims 22, 24 and 25, Valleau fails to disclose the probe with coils in meandering form. Goldfine et al. (hereinafter Goldfine) discloses a meandering winding test circuit wherein the coil is in meandering form (fig. 10A). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Valleau with the teachings of Goldfine such that providing the coils in the probe in meandering form results in an improved high frequency response and also provides a larger output signal (col. 5, lines 29 – 34 and col. 6, lines 13 - 33).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/525,026

Art Unit: 2862

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reena Aurora